

AMENDMENTS

IN THE SPECIFICATION

1) page 22, after the last paragraph, please cancel the previously added matter.

IN THE CLAIMS

Please amend the claims as follows

Please amend claim 1 as follows:

1. (Thrice Amended) A method for forming bonding pads of a semiconductor substrate comprising the steps of: -

providing top level interconnecting metal for interconnecting lines and top level bond pad metal for bond pads, said top level metal being formed selectively on an insulating film overlying the main surface of a semiconductor substrate in which a desired circuit element is being formed, the surface of said insulating film being partially exposed;

depositing a passivation layer over said top-level metal and over the partially exposed surface of said insulating layer, said passivation layer comprising a first and a second passivation layer;

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Cont.

depositing a layer of photosensitive polyimide over said passivation layer, filling keyholes between closely spaced interconnect lines, preventing etching damage and damage of cracking and delamination to the surface of said passivation layer, further providing a stress buffer to said passivation layer, reducing stress impact on the passivation layer;

patterning and etching said layer of photosensitive polyimide thereby forming a pattern for said bonding pads;

patterning and etching said passivation layer thereby exposing said bond pad, said patterning and etching of said passivation layer to take place after said patterning and etching of said layer of photosensitive polyimide; and

curing and cross-linking said photosensitive polyimide said curing and cross-linking of said photosensitive polyimide to take place after said patterning and etching of said passivation layer.

Please amend claim 8 as follows:

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8. (Thrice Amended) The method of claim 1 wherein the thickness of said photosensitive polyimide is within the range of between 5.0 and 9.5 μm after deposition of said photosensitive polyimide whereby shrinkage of up to 40% of said thickness could occur after curing of said layer of photosensitive polyimide, filling keyholes between closely spaced interconnect lines, preventing

F2
cont.

etching damage and damage of cracking and delamination to the surface of said passivation layer, further providing a stress buffer to said passivation layer, reducing stress impact on the passivation layer.

Please amend claim 15 as follows:

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15. (Thrice Amended) The method of claim 1 wherein said top level metal for interconnecting lines and top level metal for bond pads are formed within or on top of any layer of a semiconductor device other than or in addition to said semiconductor substrate.

[Please amend claim 16 as follows:]

16. (Thrice Amended) The method of claim 1 wherein said top level metal for interconnecting lines and top level metal for bond pads are formed selectively on the bare main surface of a semiconductor substrate in which a desired circuit element is being formed.

Please amend claim 17 as follows:

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17. (Twice Amended) The method of claim 1 wherein said top level metal for interconnecting lines and top level metal for bond pads are formed within or on top of any layer of a semiconductor

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device other than or in addition to said semiconductor
substrate.

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cont.

[Please amend claim 18 as follows:]

18. (Twice Amended) The method of claim 1 wherein said top level metal for interconnecting lines and top level metal for bond pads are formed selectively on the bare main surface of a semiconductor.

Please amend claim 20 as follows:

20. (Thrice Amended) A method of forming planarized bonding pads within the structure of a semiconductor device comprising the steps of:

providing a semiconductor substrate, said semiconductor substrate to contain electrical circuits or other electrical functional electrical components;

providing a wiring layer having wiring and having a plurality of bond pads having a thickness, the wiring of said wiring layer being directly connected to said bond pads in addition to being connected to said electrical circuits or other electrical functional components within said semiconductor substrate, the wiring layer being formed selectively on an insulating film overlying the main surface of a semiconductor

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substrate in which a desired circuit element is being formed,
the surface of said insulating layer being partially exposed;

depositing a layer of top metal over said bond pads thereby
depositing bond pad metal;

depositing a passivation layer over said wiring layer and
over said bond pad metal and over the exposed surface of the
insulating layer;

depositing a layer of photosensitive polyimide over said
passivation layer to a thickness within the range of between 5.0
and 9.5 μm , filling keyholes between closely spaced wiring of
said wiring layer preventing etching damage and damage of
cracking and delamination to the surface of said passivation
layer, further providing a stress buffer to said passivation
layer, reducing stress impact on the passivation layer;

patterning and etching said layer of photosensitive
polyimide thereby forming a pattern of photosensitive polyimide,
said pattern being identical to the pattern of said bond pads,
partially removing said photosensitive polyimide from above the
surface of said bond pads;

etching said layer of passivation, thereby removing said
passivation from above said bond pads, said patterning and
etching of said passivation layer to take place after said
patterning and etching said layer of photosensitive polyimide;
and

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Cont.